

NEW SPIDERS FROM NEW ENGLAND WITH NOTES ON OTHER SPECIES.

By B. J. KASTON, New Haven, Conn.

The types of the new species described in this paper will be deposited in the Museum of Comparative Zoology. I wish to thank Miss E. B. Bryant, of that institution, and Dr. W. J. Gertsch, of the American Museum of Natural History, for permitting access to type and other material for study in the preparation of this paper. Facilities for this study and financial support making possible the inclusion of the illustrations have been furnished by the Connecticut Geological and Natural History Survey, through Dr. W. E. Britton, its Superintendent.

DRASSIDAE.

Rachodrassus monroensis n. sp. (Figures 1 to 4.)

Male. Total length 4.8 mm. Carapace 2.2 mm. long, widest between 2nd and 3rd coxae, where it is 1.55 mm., and narrowed to .49 at clypeus; highest at the quite distinct dorsal groove. Carapace yellow, sparsely covered with short black hairs.

Eyes in two rows; ratio of AME:ALE:PME:PLE = 7:10:7:8. First row slightly procurved, the AME separated from each other by less than a radius, and from the ALE by about a radius. Second row broader than first (44:35), slightly procurved, the medians separated by about a diameter, and slightly more than a diameter from the laterals. Median ocular area wider behind than in front (19:14), slightly longer than wide (21:19). Laterals of each side separated by slightly more than the radius of ALE.

Height of clypeus $\frac{4}{7}$ diameter of AME. Chelicerae vertical, .84 mm. long, with oblique margins and with boss. Fangs long and thin, and overlapping each other. Promargin with well developed scopula and three teeth, the middle tooth being largest, and proximal smallest. Retromargin with two teeth, equal in size to distal tooth on promargin. Arising on the promargin near the base of the fang is a thick hair, curved and paralleling the fang and longer than the latter. On the retromargin is another, but somewhat shorter, hair. Maxillary endites parallel, evenly rounded in front, widest about $\frac{1}{3}$ the distance from the base, with well developed scopulae. Labium broader than long (23:15), not extending beyond middle of

maxillae. Sternum longer than wide (29:26), light yellow in color like the labium and endites. Hind coxae separated by $1/5$ their length.

Legs 4123, slightly darker than carapace, and without markings. Trichobothria numerous on tibiae, metatarsi, and tarsi. Claw tufts poorly developed, and weak scopulae on tarsi.

	Femur.	Patella + Tibia.	Meta- tarsus.	Tarsus.	Total.
Leg I . . .	1.68	2.52	1.26	.84	6.30 mm.
Leg II . . .	1.68	2.10	1.17	.93	5.88 mm.
Leg III . . .	1.55	1.89	1.47	.84	5.75 mm.
Leg IV . . .	2.10	2.80	2.30	.97	8.17 mm.

Tibial index of Leg I is 11.6, of Leg IV, 10.9.

Spines as follows: Leg I, femur dorsal 1-1-1, prolateral 1; patella ventral 1; tibia ventral 2-2, longer than the thickness of segment; metatarsus ventral 2-2, prolateral 1 distal, retrolateral 1 distal. Leg II, like I except none on patella and an additional prolateral on metatarsus. Leg III, femur dorsal 1-1-1, retrolateral 1-1, prolateral 1-1; tibia ventral 2-2, prolateral 1-1, retrolateral 1-1, dorsal 1; metatarsus ventral 2-2-2, prolateral 1-1, retrolateral 1-1, dorsal 2-2-2. Leg IV, femur like III except only 1 retrolateral; patella retrolateral 1; tibia ventral 2-2-2, prolateral 1-1, retrolateral 1-1, dorsal 1-1; metatarsus like III.

Abdomen tan, somewhat darker above, with a faint lanceolate basal stripe on the midline for about half its length and five pairs of indistinct darker spots on the posterior half. There is a general covering of long black hairs, longest at the anterior end, shortest on the venter. The anterior spinnerets are about twice as long as the posterior.

Palpus with femur as long as patella and tibia together. The tibia is slightly longer than the patella and bears a sharply pointed apophysis which is about half the length of the tibia. From the ventral surface of the tibia arises a very long bristle. Tarsus wide, and with the deep alveolus occupying its entire length. Palpal organ (distended in the type specimen) as figured.

Holotype male collected by the author in Monroe, Conn., Aug. 30, 1936.

The only other species of *Rachodrassus* of which the male is known is *echinus* Chamberlin. From the inadequate description the only character which can be selected to distinguish it from *monroensis* is the possession of an additional pair of ventral spines on Tibia I and II. The palpus is not figured but a comparison with the type at the M. C. Z. reveals, among other things, the fact that in *echinus* the tibial apophysis is straight rather than curved, as it is in *monroensis*, and the tarsus is narrower than in *monroensis*.

Geodrassus auriculoides (Barrows). (Figures 5 to 8.)

Drassodes auriculoides Barrows 1919, Ohio J. Sci. XIX: 355, pl. xv, f. 4 a, b. ♀

Female. Total length 9.3 mm. Carapace 4 mm. long, maximum width 2.82 mm. between 2nd and 3rd coxae, and narrowed to 1.8 mm. at clypeus; highest between 1st and 2nd coxae. Color reddish-brown without definite markings; lightest on top, darker around the eyes and along lateral margins, and somewhat smoky on posterior declivity. There is a sparse pubescence of black hairs which are longest in eye region. Dorsal groove distinct and black.

Eyes in two rows; ratio of AME:ALE:PME:PLE = 13:12:13:11. First row very slightly recurved, the medians separated by $11/13$ of a diameter, and a radius removed from the laterals. Second row broader than first (89:70), slightly procurved; the medians oval, oblique, and separated by a radius. The medians are removed from the laterals by $24/13$ of a diameter of PME. Laterals of each side separated by slightly more than the diameter of either. Median ocular area broader in front than behind (35:31) and longer than broad (43:35).

Height of clypeus $17/13$ diameter of AME. Chelicerae robust, darker than carapace, covered with fine black hairs, geniculate at base, and with boss. Fangs short and stout. Furrow oblique, promargin with scopula and three stout teeth. Of these the middle one is largest, the proximal smallest. Retro-margin with a single tooth which is smaller than any on pro-margin. Maxillary endites parallel, indented on lateral face, rounded anteriorly, with well developed scopula, and with an oblique depression on ventral face. Labium darker than endites, longer than broad (58:42), extending beyond middle of maxillae. Sternum heart-shaped, widest between 2nd coxae, broadly truncate in front, pointed behind, longer than broad (79:54), and darker in color along border. Fourth coxae separated by about $\frac{1}{3}$ their length.

Legs 4123, yellowish brown, darker above, with fine black pubescence. Scopulae on tarsi and metatarsi of legs I and II; on tarsi and distal half of metatarsi of leg III; and on tarsi of leg IV. Claw tufts well developed. Trichobothria numerous on tibiae, tarsi, and metatarsi.

	Femur.	Patella + Tibia.	Meta- tarsus.	Tarsus.	Total.
Leg I . . .	2.82	3.66	1.92	1.62	10.02 mm.
Leg II . . .	2.70	3.42	2.10	1.50	9.72 mm.
Leg III . . .	2.58	3.24	1.92	1.32	9.06 mm.
Leg IV . . .	3.30	4.20	3.00	1.62	12.12 mm.

Tibial index of Leg I is 12, of Leg IV is 12.2.

Spines as follows: Leg I, femur dorsal 1-1, prolateral 1; tibia ventral 1; metatarsus ventral 1. Leg II, like I but with an additional prolateral spine on femur. Leg III, femur dorsal 1-1-1, prolateral 1-1, retrolateral 1-1; tibia dorsal 1 near base, prolateral 1-1-1, retrolateral 1-1-1, ventral 1-1-2; metatarsus dorsal 2-2-2, prolateral 1-1, retrolateral 1-1, ventral 2-2-2. Leg IV, femur dorsal 1-1-1, prolateral 1-1, retrolateral 1 distal; tibia dorsal 1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 1-2-2; metatarsus dorsal 2-2-2, prolateral 1-1, retrolateral 1-1, ventral 2-2.

Abdomen dark brown streaked with gray, lighter in the middle of anterior half, and with indistinct chevrons behind. Venter considerably lighter than dorsum. Spinnerets dark brown tipped with black. Epigynum with a central lobe broadened and elevated slightly behind, and with a pair of lateral depressed areas either side (figure 7).

The *male* of this species has not heretofore been described. The following is based upon a specimen in the Am. Mus. Nat. Hist., collected at Saugerties, N. Y., Sept., 1911.

Total length, 7.8 mm. In general appearance essentially like female. However, the chelicerae are more strongly geniculate and the fangs are longer and slimmer in proportion. Legs 4123.

	Femur.	Patella + Tibia.	Meta- tarsus.	Tarsus.	Total.
Leg I . . .	3.30 *	4.42	2.40	1.98	12.10 mm.
Leg II . . .	3.17	4.37	2.46	missing	. . . .
Leg III . . .	2.88	3.54	2.28	1.56	10.26 mm.
Leg IV . . .	3.72	4.73	3.65	1.86	13.96 mm.

Tibial index of Leg I is 10.2, of Leg IV is 10.8.

Palpus: Tibia $\frac{3}{5}$ as long as femur, almost three times as long as patella, and $\frac{3}{4}$ as long as tarsus. Tibial apophysis quite inconspicuous, consisting of a very thin pigmented plate. Palpal organ as figured.

Record: Branford, Conn., May 22, 1936 (B. J. K.), a female with egg sac.

Geodrassus phanus Chamberlin. (Figures 9 to 11.)

Geodrassus phanus Chamberlin 1922, Proc. Biol. Soc. Washington, XXXV: 159. ♀.

This species has been known only from the type specimen from Long Island, N. Y., which, Chamberlin notes, "May be distinguished from *auriculoides* in having lateral eyes nearer each other, the shorter tib. + pat. IV, and proportions and details of epigynum." Eye measurements were given, and of course Barrows' figure of the eyes of *auriculoides* was available. I am supplying in the present paper measurements of the leg segments and figures of the epigyna of both species for comparison.

In general appearance and structure the two species are quite similar. I have before me two specimens of *phanus* which agree in being considerably lighter in color than *auriculoides*. The cephalothorax and legs are yellowish, rather than reddish brown, and the abdomen is a lighter gray and lacks even the indistinct chevron pattern of *auriculoides*. Furthermore, their epigyna differ from that of *auriculoides* in having two distinct small circular areas in each lateral lobe (figure 9) rather than one (figure 7).

While it may be true that *phanus* has the lateral eyes nearer each other than in *auriculoides* this difference is very slight. In one of my specimens the space is $\frac{9}{11}$ of a diameter of an ALE, but in the other it is at least as great as the diameter of the subequal laterals. However, as a consequence of the front eye row of *phanus* being practically straight, the median ocular area is only one eighth longer

than broad, while that of *auriculoides* being recurved, this area is one fourth longer than broad.

The proportionate length of the tibia + patella IV is not a safe character. In Chamberlin's specimen it was $4/4.38$ that of the cephalothorax. In one of mine it is the same length as the carapace. In the other, however, it is $3.54/3.12$ which makes it even longer than in *auriculoides* ($4.2/4$).

The relative leg lengths and tibial indices are about the same as in *auriculoides*. There are a few differences in the spination, of which perhaps might be mentioned tibia I ventral with 1-1, instead of just 1.

Records: Leete's Island, Conn., Sept. 29, 1935, and Sept. 12, 1937, both collected by D. S. Riggs.

Drassodes robinsoni Chamberlin. (Figures 12 to 14.)

Drassodes robinsoni Chamberlin 1919, Ann. Ent. Soc. America, XII: 245, pl. xvi, f. 2. ♀.

Female. Total length 10.2 mm. Carapace 4.2 mm. long, 3.23 mm. wide between 2nd and 3rd coxae, and narrowed to 2.04 mm. at clypeus; highest between 1st and 2nd coxae. Color orange brown without definite markings, slightly darker around eyes, and covered with a sparse pubescence of fine black hairs. Dorsal groove distinct.

Eyes in two rows; ratio of AME: ALE: PME: PLE = 15: 14: 15: 13. First row practically straight, the medians separated by $12/15$ their diameter, and about a radius from the laterals. Second row broader than first (98:78), slightly procurved; the medians oval, oblique, separated by $8/15$ their diameter, and twice their diameter from the laterals.* Laterals of each side separated by $17/14$ the diameter of ALE. Median ocular area broader in front than behind (41: 36) and as long as broad in front.

Height of clypeus $17/15$ diameter of AME. Chelicerae robust, covered with long black hairs, slightly geniculate at base, and with boss. Fangs short and stout. Furrow oblique, promargin with scopula and three stout teeth, of which the median is largest, and the other two about the same size. Retromargin with two subequal teeth, smaller than promarginal. Maxillary endites parallel, slightly indented on lateral face, rounded anteriorly, with well developed scopula, and with an oblique depression on ventral face. Labium longer than wide (55:50) narrowed at anterior end, extending slightly

beyond middle of endites. Sternum heart-shaped, darker along border, longer than broad (86:63) truncate in front and pointed behind. Fourth coxae separated by $1/4$ their length.

Legs 4123, orange in color, like the sternum; slightly darker above. Scopulae on tarsus, metatarsus and distal fifth of tibia of leg I; on tarsus and metatarsus of leg II; on tarsus and distal half of metatarsus of leg III; and on tarsus and distal fifth of metatarsus of leg IV. All claw tufts well developed. Trichobothria numerous on tibiae, tarsi and metatarsi.

	Femur.	Patella + Tibia.	Meta- tarsus.	Tarsus.	Total.
Leg I...	3.60	4.55	2.70	1.68	12.53 mm.
Leg II...	3.48	4.43	2.52	1.74	12.17 mm.
Leg III...	3.12	3.72	2.34	1.56	10.74 mm.
Leg IV...	4.07	5.04	3.72	1.68	14.51 mm.

Tibial index of leg I is 11.5, of leg IV, 11.6.

Spines as follows: Leg I, femur dorsal 1-1, prolateral 1; tibia ventral 1-1; metatarsus ventral 1. Leg II, femur dorsal 1-1, prolateral 1-1; tibia ventral 0-1; metatarsus ventral 2-1p. Leg III, femur dorsal 1-1-1, prolateral 1-1, retrolateral 1-1; tibia dorsal 1 near base, prolateral 1-1-1, retrolateral 1-1-1, ventral 1p-2-2; metatarsus dorsal 2-2, prolateral 1-1, retrolateral 1-1, ventral 2-2-2. Leg IV, femur dorsal 1-1, prolateral 1-1, retrolateral 1 distal; tibia dorsal 1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 1-2-2; metatarsus dorsal 1-2-2, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2.

Abdomen grayish brown, somewhat lighter below. There is an indistinct, light hastate stripe in the center of the anterior half, slightly darker along its edges, and a number of indistinct chevrons on the posterior half. Spinnerets orange. Epigynum with a central lobe broadened behind, and with a pair of lateral depressed areas (fig. 12).

Records: This species, first described from Utah, has since been taken at various localities through the middle west and east. In New England specimens have been collected at Woods Hole, Mass., July 8, 1901 (H. W. Britcher); Norwalk, Conn., May 24-30, 1933, July 4, 1935 (W. J. Gertsch); and Branford, Conn., Sept. 3, 1937 (D. S. Riggs).

There seems to be considerable variation exhibited in the form of the epigynum, so that this structure may resemble that of *D. celes* Chamberlin. The specimens from Woods Hole have this structure looking even more like that of *celes* than the one from Branford represented in figure 12.

Gnaphosa fontinalis Keyserling. (Figures 15 to 17.)

Gnaphosa fontinalis Keyserling 1887, Verh. zoo. bot. Ges. Wien, XXXVII: 426, pl. vi, f. 4. ♀.

The *male* is here described for the first time. Total length 6.5 mm. Carapace 3.2 mm. long, 2.64 mm. wide between 2nd and 3rd coxae, and narrowed to 1.4 mm. at clypeus; highest at pars thoracica just posterior to dorsal groove. Color dark brown, bordered with black, and with smoky bands along radial furrows. A few short scattered hairs in eye region and along postero-lateral angles of carapace.

Eyes in two rows; ratio of AME: ALE: PME: PLE = 8: 10: 9: 7. First row procurved, the medians separated by $\frac{5}{8}$ of a diameter, and $\frac{1}{4}$ their diameter from the laterals. Posterior row broader than first (56: 41), recurved; the medians oval, separated by $\frac{5}{9}$ of a diameter, and $\frac{14}{9}$ their diameter from the laterals. Laterals of each side separated by $\frac{12}{7}$ diameter of PLE. Median ocular area practically square.

Height of clypeus $\frac{18}{8}$ the diameter of AME. Chelicerae vertical, with boss, light brown, with long black hairs. Fangs small. Promargin of furrow with 3 small teeth. Retromargin with the usual denticulate lobe. Maxillary endites light brown, convex on the outer margin, converging slightly in front of labium, with an oblique depression on ventral face, and a thick scopula. Labium longer than wide (35: 28), extending beyond middle of endites. Sternum brown bordered with black, truncate in front, pointed behind, and longer than wide (62: 53). Hind coxae separated by $\frac{1}{6}$ their length.

Legs 4123, dark brown, with longitudinal black markings, most noticeable on femora. Tarsi and metatarsi lighter. Tarsi scopulate along distal $\frac{5}{6}$. Claw tufts inconspicuous. Trichobothria on tarsi, metatarsi, and tibiae.

	Femur.	Patella + Tibia.	Meta- tarsus.	Tarsus.	Total.
Leg I... 2.34	2.92	1.46	1.40	8.12 mm.	
Leg II... 2.13	2.68	1.40	1.23	7.44 mm.	
Leg III... 1.95	2.27	1.63	1.16	7.01 mm.	
Leg IV... 2.48	3.40	2.62	1.61	10.11 mm.	

Tibial index of leg I is 16, of leg IV, 11.1.

Spines as follows: Leg I, femur dorsal 1, prolateral 1 distal; tibia ventral 1p-2-2; metatarsus ventral 2-2. Leg II, femur dorsal 1, prolateral 1-1; tibia prolateral 1-1, ventral 1r-2-2; metatarsus ventral 2-2. Leg III, femur dorsal 1-1-1, prolateral 1-1, retrolateral 1-1; patella retrolateral 1; tibia prolateral 2-1-1, retrolateral 1-1-1, ventral 2-2-2; metatarsus prolateral 2-2, retrolateral 1-2-2, ventral 2-1r-2-2. Leg IV, femur dorsal 1-1, prolateral 1-1, retrolateral 1-1; patella retrolateral 1; tibia prolateral 2-2, retrolateral 1-1, ventral 2-2-2; metatarsus prolateral 1-2-2, retrolateral 1-2-1-1, ventral 2-2-2.

Abdomen black covered with fine hairs, which are longer and coarser at anterior end. Anterior half with three pairs of lighter elongate spots; the first pair parallel, the second and third slightly divergent. The second pair is smallest and slightly closer together than the other two pairs which are about the same size. Venter somewhat lighter than dorsum; pulmonary areas orange-brown.

Palpus with femur longer than patella + tibia. Patella about twice the length of tibia from above. Tibial apophysis thick at base, drawn out to a blunt point. The median apophysis of the palpal organ bears a fine, curved hook distally. The embolus arises on the retrolateral surface, describes a wide arc ventrally, with its major portion normally lying in a narrow groove along the prolateral edge of the cymbium.

Female. Total length 9.6 mm. Length of carapace 4.1 mm. Essentially like male in most characters. Median ocular area somewhat longer than wide. Black markings on legs not as distinct as in male.

	Femur.	Patella + Tibia.	Meta- tarsus.	Tarsus.	Total.
Leg I . . .	2.48	3.06	1.40	1.34	8.28 mm.
Leg II . . .	2.19	2.77	1.32	1.20	7.48 mm.
Leg III . . .	2.18	2.48	1.63	1.26	7.55 mm.
Leg IV . . .	2.77	3.51	2.54	1.52	10.33 mm.

Tibial index of leg I is 19.1, of leg IV, 16.7.

Legs I and II with scopulae well developed on tarsi and distal half of metatarsi. Legs III and IV with scopulae poorly developed on tarsi.

Spines differing from those of male as follows: Leg I, tibia ventral 2 distal. Leg II, femur dorsal 1-1, prolateral 1 distal, tibia prolateral 0; ventral 0-1-2; metatarsus ventral 2-2-2. Leg III, femur dorsal 1-1; tibia prolateral 1-1-1; metatarsus retrolateral 2-2; ventral 2-2-2. Leg IV, femur prolateral 1d; tibia prolateral 1-1, retrolateral 2-1-1; metatarsus retrolateral 1-2-2.

Epigynum as figured.

Records: (All Connecticut). Male (allotype) and female, Norwalk, May 18-30, 1933 (W. J. Gertsch). Female, Branford, June 12, 1936 (B. J. K.). Female, Whitneyville, July 1, 1937 (D. S. Riggs). Female, Bethany, Sept. 25, 1937 (B. J. K.).

The character of the palpal organ is such as to place this species among those others removed by Chamberlin from *Gnaphosa* to his *Cylphosa*, 1933. The females of this latter group cannot be distinguished from *Gnaphosa sens. str.*

CLUBIONIDAE

Micaria multimaculata n. sp. (Figures 18 to 23.)

Female. Total length 2.86 mm. Carapace 1.29 mm. long, widest at the 2nd coxae where it is .79 mm., and narrowed to .53 mm. at clypeus. Highest in the middle of its length, sloping gently from there forward and to the rear. Pars cephalica quite convex viewed from in front. Ground color dark brown suffused with gray, and covered with iridescent scales. White scales arranged to make a pair of spots in center, a pair between 2nd and 3rd coxae, and a pair at base of 4th coxae. Carapace clothed with sparse appressed hairs, a few longer and erect in eye region.

Eyes subequal, in two rows. First row slightly procurved, with medians slightly closer to the laterals than to each other. Posterior row broader than anterior (25:18), straight, eyes equidistant. Median ocular area narrower in front than behind (8:11) and about as long as wide.

Height of clypeus about $3/2$ diameter of AME. Chelicerae practically vertical, with small boss. Promargin of fang furrow with one small tooth, retromargin with none. Endites indented somewhat on outer margin, with a slight oblique depression on ventral face; widened anteriorly where they are inclined over labium. Labium slightly longer than broad (12:10) extending beyond middle of endites. Sternum triangular, widest at 2nd coxae, longer than broad (45:32), and, like the labium and endites, dark brown suffused with gray. Fourth coxae separated by $1/5$ their length.

Legs 4123. Leg I with coxa black above and blackish brown beneath. Basal half of femur dark brown, distal half, patella and most of tibia white; distal tip of tibia, metatarsus, and tarsus dark brown. Leg II with coxa yellowish, mottled with brown above and on sides. Femur dark above, somewhat lighter distally below, patella and tibia light, metatarsus and tarsus darker. Legs III and IV with coxae as in leg II, with tarsi light and all other segments dark brown. All tarsi and metatarsi with a double row of thick bristles beneath, most noticeable on legs I and II. Trichobothria on tibiae, metatarsi and tarsi.

	Femur.	Patella + Tibia.	Meta- tarsus.	Tarsus.	Total.
Leg I...	.73	.92	.50	.48	2.63 mm.
Leg II...	.70	.78	.42	.49	2.39 mm.
Leg III...	.58	.73	.50	.44	2.25 mm.
Leg IV...	.95	1.14	.77	.50	3.36 mm.

Tibial index of leg I is 11.1, of leg IV, 9.6.

Spines as follows: Leg I, femur prolateral 1d. Leg II, femur dorsal 1 near base. Leg III, femur dorsal 1 near base; tibia ventral 1p-2; metatarsus ventral 2 distal, prolateral 1-1, retrolateral 1d. Leg IV, femur dorsal 1 near base; tibia prolateral 1-1, ventral 2 distal; metatarsus ventral 2-2-2-2.

Abdomen black above, covered with iridescent scales and fine

black hairs. Groups of white scales are arranged to form five white spots on the anterior half of the abdomen, as shown in figure 18. Also partly visible from above are the two oblique white bars on each side. There is a distinct transverse depression just in front of middle as shown in figure 22. Venter not quite as dark as dorsum, yellow for a thin strip behind genital furrow and around epigynum.

Pediceal plainly visible from above. Epigynum quite large for the size of the spider; for details see figure 23.

Male. Total length 2.74 mm. In body pattern and general structure essentially like female. The abdomen has a much shallower transverse depression (figure 21), the tarsi are lighter than in the female, and the sternum is somewhat wider in proportion (44:35). In life there is a patch of white scales on the dorsal surface of coxae III and IV, and on femur IV.

	Femur.	Patella + Tibia.	Meta- tarsus.	Tarsus.	Total.
Leg I...	.88	.98	.50	.54	2.90 mm.
Leg II...	.73	.88	.48	.47	2.56 mm.
Leg III...	.61	.76	.50	.39	2.26 mm.
Leg IV...	.83	.95	.81	.54	3.13 mm.

Tibial index of leg I is 9, of leg IV, 12.3.

Palpus with femur longer than patella + tibia. Patella slightly longer than tibia, the latter with an unpigmented pointed apophysis $\frac{2}{5}$ the length of the segment. The palpal organ protrudes quite considerably from the cymbium, the details difficult to ascertain due to very slight pigmentation of the parts. The tip of the embolus lies between two of the three stout spines on the ventral side of the cymbium.

Female type, together with two males in the penultimate instar (matured Sept. 21), were collected at Bethany, Conn., Sept. 14, 1937 (D. S. Riggs).

This species is closely related to *M. laticeps* Emerton. The latter has no pattern of spots, though by the time it was described it might have lost all distinctive marks that may formerly have been present. It is only slightly smaller than *laticeps* but has the pars cephalica not quite so broad, the sternum not quite so narrow, and has a somewhat longer tibial apophysis.¹

¹ *M. laticeps*, described (Trans. Connecticut Acad. Sci., 1909,

PISAURIDAE

Pisaurina brevipes (Emerton). (Figure 24.)*Pisaura brevipes* Emerton 1911, Trans. Connecticut Acad. Sci., XVI: 400, pl. iv, f. 6, 6a. ♀.*Pisaurina brevipes* Bishop 1924, N. Y. State Mus. Bull. No. 252, p. 29, pl. vii, f. 2, pl. xxxiii, f. 5. ♀.

The *male* of this species is here described for the first time. In general appearance, color and markings it agrees fairly well with the description of the female as given by Bishop.

The typical median dorsal stripe on the abdomen has the sides practically straight and is bordered each side by a bright white line. The chief discrepancy, as might be expected, is the relative length of the legs.

Data for comparison are furnished herewith.

	Femur.	Patella + Tibia.	Meta- tarsus.	Tarsus.	Total.
<i>Male</i>					
Leg I...	4.2	6.0	3.9	2.1	16.2 mm.
Leg II...	4.5	6.0	4.2	2.1	16.8 mm.
Leg III...	4.2	5.1	3.6	1.7	14.6 mm.
Leg IV...	4.5	6.0	4.5	1.9	16.9 mm.

Tibial index of leg I is 10.4, of leg IV, 11.7.
Length of body 10.8 mm.

	Femur.	Patella + Tibia.	Meta- tarsus.	Tarsus.	Total.
<i>Female</i>					
Leg I...	4.5	6.0	3.6	1.5	15.6 mm.
Leg II...	4.8	6.0	3.6	1.5	15.9 mm.
Leg III...	4.2	5.1	3.3	1.2	13.8 mm.
Leg IV...	4.8	6.0	4.5	1.5	16.8 mm.

XIV: 214, pl. x, f. 4) from a single male, is stated to lack a tibial apophysis. Examination of the type at the M. C. Z. reveals the fact that Emerton's drawing was made from the palp from which the apophysis had been broken off. The other palp presents a small, but distinct, apophysis.

Tibial index of leg I is 13.5, of leg IV, 14.1.

Length of body 13 mm.

To facilitate comparison with *P. mira* (Walckenaer) similar data are tabulated below. An attempt was made to select for this purpose individuals of about the same body size as the above.

P. mira

	Femur.	Patella + Tibia.	Meta- tarsus.	Tarsus.	Total.
<i>Male</i>					
Leg I...	7.5	10.4	9.0	3.9	30.8 mm.
Leg II...	8.1	10.0	9.0	3.6	30.7 mm.
Leg III...	6.0	7.8	6.6	2.7	23.1 mm.
Leg IV...	7.5	9.0	8.4	3.3	28.2 mm.

Tibial index of leg I is 7.3, of leg IV, 8.1.

Length of body 10.5 mm.

	Femur.	Patella + Tibia.	Meta- tarsus.	Tarsus.	Total.
<i>Female</i>					
Leg I...	6.3	8.7	5.7	2.4	23.1 mm.
Leg II...	6.3	8.7	6.0	2.4	23.4 mm.
Leg III...	6.0	7.2	5.1	2.1	20.4 mm.
Leg IV...	7.2	8.4	6.3	2.4	24.3 mm.

Tibial index of leg I is 10.2, of leg IV, 10.5.

Length of body 12.6 mm.

It can be readily seen from the tibial indices that while the male of *brevipes* has thinner legs than the female they are of about the same order of thickness as the female of *mira*. Furthermore the length of the first leg is such as to necessitate revision of Bishop's key to the two species. For *brevipes* he gives "first leg without femur and basal joints, shorter than body"; for *mira*, these segments "as long as body." This should be changed to read for *brevipes*: in female, first leg without femur and basal segments shorter than, and in male not more than 1.1 times as long as, body. For *mira*: these segments in female about 1 1/3 times, in male more than twice, the length of body.

Palpus. The tibial apophysis arises somewhat farther distad than in *mira*, and is drawn out to a blunt point. In *mira* the apophysis is truncated and concave on its inner surface. In the specimens of *mira* which I have examined there is much variation in length of the attenuated portion of the distal plate-like structure ("fulcrum" of Comstock?) overlying the embolus. In none, however, have I seen one in which this is as long as in *brevipes*. This is at the expense of the basal portion of the fulcrum, which is proportionately narrower than in *mira*.

Emerton apparently had only small individuals of *brevipes*. I have several females which average as large as those of *mira*.

Records: Male (allotype), Westville, Conn., summer of 1933 (B. J. K.). Females, South Meriden, Conn., May 30, 1935 (H. L. Johnson); and Meriden, Conn., June 9, 1936 (H. L. J.).

ATTIDAE

Euophrys nearctica n. sp. (Figures 25 and 26.)

Female. Total length 3.6 mm. Carapace 1.7 mm. long, widest between 2nd and 3rd coxae, where it is 1.22 mm., and with a maximum height of .9 mm at dorsal eyes. Pars cephalica black and shining. Pars thoracica brown suffused with black. Thoracic groove imperceptible. There are a few hairs scattered about on sides and dorsum, longer around front row of eyes.

Ocular quadrangle slightly less than half the length of carapace. First row of eyes 1.11 mm. long, slightly recurved. Ratio of medians to laterals 25:15, practically contiguous. Second row midway between first and third. Third row 1.14 mm. long, the eyes almost as large as anterior laterals (13/15).

Height of clypeus $8/25$ diameter of AME. Chelicerae vertical, grayish except near fang grooves where they are brown. Fang long and evenly curved. Promargin with two teeth, of which the distal is the larger. Retromargin with one tooth as large as the distal on promargin. Maxillary endites somewhat indented on lateral face, slightly wider distally than at base, and with a thick scopula. Labium broader than long (20:15) extending not quite to middle of maxillae. Sternum oval, longer than wide (52:40), broadly truncate in front, with first coxae much farther apart than the width of labium. Like the labium and endites in color, brown suffused with grey. Hind coxae almost contiguous. All coxae yellow.

Legs 4312. Legs II, III and IV mostly yellow to light

brown, somewhat darker above than below, covered with fine black hairs. Leg I not much heavier than the others, but darker brown to black, especially the tibia and metatarsus. Trichobothria on tibiae, metatarsi and tarsi.

	Femur.	Patella + Tibia.	Meta- tarsus.	Tarsus.	Total.
Leg I . . .	.93	1.11	.41	.39	2.84 mm.
Leg II . . .	.75	.95	.42	.31	2.43 mm.
Leg III . . .	.97	1.05	.54	.42	2.98 mm.
Leg IV . . .	1.19	1.40	.93	.49	4.01 mm.

Tibial index of leg I is 19.7, of leg IV, 14.6.

Spines as follows: Leg I, femur dorsal 1-1-1; tibia ventral 2-2-2; metatarsus ventral 2-2. Leg II same as I, except tibia ventral 0-1-2. Leg III, femur dorsal 1-1-1, prolateral 1 distal; tibia dorsal 2, ventral 0-1-1, retrolateral 1; metatarsus dorsal 2-2, ventral 2-2. Leg IV, femur dorsal 1-1-1, retrolateral 1 distal; tibia ventral 0-1p-2, prolateral 0-1-1, retrolateral 1-1-1; metatarsus ventral 1p-2, prolateral 2-2, retrolateral 1-1-2.

Abdomen oval, ground color yellow to brown like the legs, with a pattern of gray as shown in figure 25. Venter with three broad gray longitudinal bands irregularly edged. Epigynum, figure 24.

This species resembles *monadnock* Emerton, but can be distinguished from the latter by its smaller size, somewhat thinner legs, different abdominal pattern, and in the possession of a retromarginal cheliceral tooth. Moreover, upon comparing the epigyna one finds that in *monadnock* the ducts run from the anterior border posteriad to the receptacula, while in *nearctica* they run anteriad, as figured.

If one uses the key to genera in the Peckhams' revision of the Attidae of North America (1909, Trans. Wisconsin Acad. Sci., XVI), it will be found that *nearctica* fits almost entirely the characters given for *Sidusa*, p. 378, as *Euophrys* is taken out on the basis of the retromargin of the chelicera lacking a tooth. This of course is misleading, for the numerous European species of this genus, as described for example in the works of Simon, Roewer, and Dahl, all have the single conical tooth. Moreover, *Sidusa* differs from

Euophrys in a number of important characters not mentioned by the Peckhams in their key.

Holotype female collected at Old Orchard, Maine, by D. S. Riggs, Aug. 26, 1937.

EXPLANATION OF FIGURES.

PLATE VIII.

- Fig. 1. *Rachodrassus monroensis*, male, left palpus, ventral aspect.
2. Idem, distal portion of left chelicera.
3. Idem, left palpus, retrolateral aspect.
4. Idem, eyes from above.
5. *Geodrassus auriculoides*, right palpus, ventral aspect.
6. Idem, retrolateral aspect.
7. Idem, epigynum.
8. Idem, distal portion of left chelicera of male.
9. *Geodrassus phanus*, epigynum.
10. Idem, distal portion of left chelicera of female.
11. Idem, eyes of female, from above.
12. *Drassodes robinsoni*, epigynum.
13. Idem, eyes of female from above.
14. Idem, distal portion of left chelicera of female.
15. *Gnaphosa fontinalis*, left palpus, retrolateral aspect.
16. Idem, ventral aspect.
17. Idem, epigynum.